Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

NATIONAL QUALITY MEASURES CLEARINGHOUSE

General

Title

Hematology: percentage of patients aged 18 years and older, seen within a 12 month reporting period, with a diagnosis of chronic lymphocytic leukemia (CLL) made at any time during or prior to the reporting period who had baseline flow cytometry studies performed and documented in the chart.

Source(s)

American Society of Hematology (ASH). Hematology: chronic lymphocytic leukemia (CLL): baseline flow cytometry. Washington (DC): American Society of Hematology (ASH); 2015 Dec. 2 p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of patients aged 18 years and older, seen within a 12 month reporting period, with a diagnosis of chronic lymphocytic leukemia (CLL) made at any time during or prior to the reporting period who had baseline flow cytometry studies performed and documented in the chart.

Rationale

Due to the distinct pattern of protein antigens expressed in chronic lymphocytic leukemia (CLL), flow cytometry should be performed in order to confirm the diagnosis, correctly characterize the pathological cells, and determine prognosis. In some instances, flow cytometry may also offer additional therapeutically relevant information (DiGiuseppe & Borowitz, 1998).

Clinical Recommendation Statements:

The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines:

Adequate immunophenotyping is essential to establish the diagnosis of CLL/small lymphocytic lymphoma (SLL). Flow cytometry of peripheral blood is adequate for the diagnosis of CLL, and a biopsy is generally not required (National Comprehensive Cancer Network [NCCN], 2015).

Evidence for Rationale

American Society of Hematology (ASH). Hematology: chronic lymphocytic leukemia (CLL): baseline flow cytometry. Washington (DC): American Society of Hematology (ASH); 2015 Dec. 2 p.

DiGiuseppe JA, Borowitz MJ. Clinical utility of flow cytometry in the chronic lymphoid leukemias. Semin Oncol. 1998 Feb;25(1):6-10. [28 references] PubMed

National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: non-Hodgkin's lymphoma. V1.2016 [slide set]. Fort Washington (PA): National Comprehensive Cancer Network (NCCN); 2015.

Primary Health Components

Chronic lymphocytic leukemia (CLL); flow cytometry

Denominator Description

All patients aged 18 years and older, seen within a 12 month reporting period, with a diagnosis of chronic lymphocytic leukemia (CLL) made at any time during or prior to the reporting period (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Patients who had baseline flow cytometry studies performed and documented in the chart (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

The American Medical Association (AMA)-convened Physician Consortium for Performance Improvement (PCPI) in collaboration with the American Society of Hematology (ASH) conducted a measure testing project from May to September of 2010 to ensure that all four hematology measures were feasible to implement and reliable. Two testing projects were conducted utilizing patient records in the electronic health record (EHR) environment and claims data. The two sites were located in different United States (U.S.) states and were selected based on their ability to meet the measure testing site criteria. Site 1 was a small-scale hematology group practice and Site 2 was a large-scale multi-specialty group clinic; both sites were in an urban setting.

Reliability Testing

The purpose of reliability testing was to evaluate whether the measure definitions and specifications, as prepared by the PCPI, yield stable, consistent measures. Measures were tested using information stored in the EHR environment and claims data from both sites. Inter-rater reliability was performed in the EHR environment. Parallel forms reliability was performed reviewing Physician Quality Reporting System (PQRS) claims information compared to a manual review of the patient chart.

Reliability Testing Results

Overall the measures were found to be reliable. Inter-rate reliability testing was conducted and Kappa statistics were calculated for the measures, which demonstrated almost perfect agreement.

One of the two measure testing sites participated in the PQRS program and submitted claims comparison on two measures. PQRS claims were reviewed and information was verified in the record review for a significant portion of these charts.

Evidence for Extent of Measure Testing

American Society of Hematology, Physician Consortium for Performance ImprovementÂ®. Hematology physician performance measurement set. Washington (DC): American Society of Hematology (ASH); 2014 Nov. 17 p. [6 references]

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Individual Clinicians or Public Health Professionals

Statement of Acceptable Minimum Sample Size

Does not apply to this measure

Target Population Age

Age greater than or equal to 18 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

12 month reporting period

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Encounter

Patient/Individual (Consumer) Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions
All patients aged 18 years and older, seen within a 12 month reporting period, with a diagnosis of chronic lymphocytic leukemia (CLL) made at any time during or prior to the reporting period

Denominator Criteria (Eligible Cases):
Patients aged greater than or equal to 18 years on date of encounter

AND

Diagnosis for CLL – not in remission (refer to the original measure documentation for International Classification of Diseases, Tenth Revision, Clinical Modification [ICD-10-CM] codes)

AND

Patient encounter during the reporting period (refer to the original measure documentation for Current Procedural Terminology [CPT] codes)

Exclusions

> Documentation of medical reason(s) for not performing baseline flow cytometry studies
> Documentation of patient reason(s) for not performing baseline flow cytometry studies (e.g., receiving palliative care or not receiving treatment as defined above)
> Documentation of system reason(s) for not performing baseline flow cytometry studies (e.g., patient previously treated by another physician at the time baseline flow cytometry studies were performed)

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions
Patients who had baseline flow cytometry* studies performed and documented in the chart

**Baseline Flow Cytometry Studies*: Refer to testing that is performed at time of diagnosis or prior to initiating treatment for that diagnosis. Treatment may include antineoplastic therapy.

Exclusions

Unspecified

Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Electronic health/medical record

Paper medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

Measure #70: hematology: chronic lymphocytic leukemia (CLL): baseline flow cytometry.

Measure Collection Name

Hematology Measure Set

Submitter

American Society of Hematology - Medical Specialty Society

Developer

American Society of Hematology - Medical Specialty Society

Funding Source(s)

The American Society of Hematology

Composition of the Group that Developed the Measure

Hematology Work Group: Steven L. Allen, MD (*Co-chair*, hematology/oncology); William E. Golden, MD (*Co-chair*, internal medicine [IM]); Kenneth Adler, MD (hematology/IM); Daniel Halevy, MD (nephrology); Stuart Henochowicz, MD, MBA (IM); Timothy Miley, MD (hematopathology); David Morris, MD (radiation oncology); John M. Rainey, MD (medical oncology); Samuel M. Silver, MD, PhD (hematology/oncology); Lawrence Solberg, Jr., MD, PhD (hematology/IM)

American Society of Hematology: Mila Becker, Esq.; Pamela Ferraro, MS; Sue Frechette, BSN, MBA (Consultant)

American Medical Association: Karen S. Kmetik, PhD; Samantha Tierney, MPH

American Society of Clinical Oncology: Kristen McNiff, MPH

American Society for Therapeutic Radiology and Oncology: Emily Wilson

Leukemia and Lymphoma Society: Hildy Dillon, MPH; Mary Grace Pagaduan, MPH

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Physician Consortium for Performance Improvement (PCPI) Consultants: Rebecca Kresowik; Timothy F. Kresowik, MD

Financial Disclosures/Other Potential Conflicts of Interest

Conflicts, if any, are disclosed in accordance with the Physician Consortium for Performance Improvement® conflict of interest policy.

Measure Initiative(s)

Physician Quality Reporting System

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2015 Dec

Measure Maintenance

American Society of Hematology (ASH) reviews/updates measures annually

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

This measure updates a previous version: American Society of Hematology, Physician Consortium for Performance Improvement®. Hematology physician performance measurement set. Washington (DC): American Society of Hematology (ASH); 2014 Nov. 17 p.

The measure developer reaffirmed the currency of this measure in February 2017.

Measure Availability

Source not available electronically.

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NQMC Status

This NQMC summary was completed by ECRI Institute on September 13, 2007. The information was verified by the measure developer on October 26, 2007.

This NQMC summary was edited by ECRI Institute on September 1, 2009.

This NQMC summary was retrofitted into the new template on June 6, 2011.

This NQMC summary was edited again by ECRI Institute on April 27, 2012.

Stewardship for this measure was transferred from the PCPI to the ASH. ASH informed NQMC that this measure was updated. This NQMC summary was updated by ECRI Institute on July 28, 2015. The information was verified by the measure developer on August 27, 2015.

This NQMC summary was updated again by ECRI Institute on April 18, 2016. The information was verified by the measure developer on May 24, 2016.

The information was reaffirmed by the measure developer on February 14, 2017.

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Production

Source(s)

American Society of Hematology (ASH). Hematology: chronic lymphocytic leukemia (CLL): baseline flow cytometry. Washington (DC): American Society of Hematology (ASH); 2015 Dec. 2 p.

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